

TQF3: Course Specification

Section 1: General Information

1. Course Code and Title

ICBI 403: Introduction to Tropical Medicine

2. Number of Credits

4 (4-0-8) (Lecture-Lab-Self-study)

3. Curriculum and Degree Title

Bachelor of Science (Biological Science)

4. Faculty / College / Institute

International College, Mahidol University

5. Type of Course

Elective Course

6. Semester / Academic Year Offered

Summer 2026

7. Prerequisite(s)

ICBI 211

8. Course Enrollment Conditions

Number of students: 30

Section 2: Aims and Objectives

1. Course Aims

To introduce students to the environmental and biological factors contributing to the prevalence of tropical diseases and equip them with knowledge of disease distribution, transmission, and prevention strategies—especially in Southeast Asia.

2. Course Objectives

By the end of this course, students will be able to:

- Explain the factors that facilitate endemic diseases.
- Describe the distribution and transmission of diseases in tropical countries.
- Identify and explain methods of prevention for tropical diseases.

Section 3: Course Description and Teaching Schedule

Course Description

Environmental factors in tropical countries which facilitate endemic diseases; geographical distribution and transmission of commonly found diseases caused by microbes, protozoa, and helminths with special reference to Southeast Asia; non-infectious diseases existing in the region such as nutritional disorders, food poisoning, snake and other venomous bites and stings; prevention of tropical diseases.

Updated Weekly Teaching Plan (Global Health Summer School Activities)

Date/day	Topic / Activity	Lecture (hrs)	Lab (hrs)	Self-study (hrs)
July 6, 2026	Overview of health disparities, disease burden, health prevention, and social determinants of health in low-resource settings	4	0	8
July 7, 2026	Simulation Experience: Social Barriers to Exercise	4	0	8
July 8, 2026	Occupational and Environmental Health Issues for a Developing Nation Case studies on occupational and environmental health and health hazards from snakebites PM: Visit to the Thai Red Cross Serpentarium	4	0	8
July 9, 2026	"Healthy ageing and social determinants of health in older adults" "check-up clinic walkthrough: comprehensive check-up" (11.00-12.00) PM: Group work: 1) What's the appropriate age-friendly environment in geriatric clinic?	4	0	8

July 10, 2026	AM: Cultural activity: Visit Mahasawat canal, community- based tourism PM: Cultural activity: Thai boxing	4	0	8
July 13. 2026	Monday (2025-07-13): AM: Introduction to helminthic and protozoan infections, their impact on public health (9.00- 10.00) Introduction to diagnostic techniques, including microscopy for malaria and other parasitic infections 1 (10.00-12.00) PM: Case-based diagnosis and management of parasitic infections in the tropics 1 (13.00- 16.00)	4	0	8
July 14, 2026	Tuesday (2025-07-14): Introduction to diagnostic techniques, including microscopy for malaria and other parasitic infections 2 (10.00-12.00) Case-based diagnosis and management of parasitic infections in the tropics 2 (13.00- 16.00)	4	0	8
July 15, 2026	Wednesday (2025-07-15): The women of Thai communities and their ability to provide home medical care	4	0	8
July 16, 2026	Thursday (2025-07-16): AM: Culture, Community, Health, and Wellness	4	0	8
July 17, 2026	Friday (2025-07-17): Join ICBI 403 Trop Med PM: Child Health in a Developing	4	0	8

Nation: Chulathida Chomchai
Pediatric Environmental Health
case-based learning 13.00-16.00

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Section 4: Teaching and Learning Methods

1. Teaching Methods

- Lectures
- Assigned readings
- In-class discussions

2. Teaching Media

- PowerPoint presentations
- Course handouts and textbook materials

Section 5: Student Assessment and Evaluation

1. Learning Outcomes Assessment

Student achievement will be evaluated based on:

- Understanding of factors facilitating endemic diseases
- Ability to describe disease distribution and transmission
- Knowledge of disease prevention methods

2. Assessment Breakdown

- Written examination: 50% (MCQ – CRQ)
 - Attendance and participation: 20%
 - Reflection journal of key activities: 30%
- Total: 100%

3. Grading Scale

A = 85 and above
B+ = 80–84
B = 75–79
C+ = 70–74
C = 65–69
D+ = 60–64
D = 55–59
F = Below 55

Minimum Passing Grade: D (60%)

Attendance Requirement: Minimum 80% of total course hours

Standardization of Grades: X + 2SD corresponds to the C–C+ range

Section 6: Evaluation and Course Improvement

1. Course Evaluation

- Student achievement as measured above
- Student satisfaction survey administered at course end

2. Improvement Process

- Instructor reflection and review
- Peer review and departmental feedback

Section 7: Teaching Materials and References

Required Textbook:

- Peters, W., & Pasvol, G. (2002). Tropical Medicine and Parasitology (5th ed.). Mosby Co., USA.

Section 8: Instructor and Coordinator Information

Course Instructor:

- Professor Chulathida Chomchai, M.D.

Course Coordinator:

- Professor Chulathida Chomchai, M.D.

Special note:

Global Health in Action: A Transformative Summer Experience in Thailand TH

Step beyond the classroom and into the heart of Southeast Asia with the **Global Health Summer School at Mahidol University International College (MUIC)**—a vibrant and immersive journey into the world’s most pressing health challenges and innovations.

In just two dynamic weeks, students from around the world gain first-hand exposure to the **social, cultural, and environmental factors** shaping health across tropical regions. From **parasitic infections** to **aging in place**, and from **traditional healing practices** to **cutting-edge medical simulations**, this program blends **academic excellence** with **real-world relevance**.



Highlights Include:

- **Hands-on field visits** to local communities and health centers, including a memorable trip to the Mahasawat canal to explore how culture and health intersect at the grassroots level.
- **Interactive laboratory experience** on infectious diseases, and malaria diagnostic techniques

- **Engagement with Thai healthcare professionals**, public health experts, and traditional practitioners who offer diverse perspectives on wellness and disease prevention.
- **Field visits:** Thai Red Cross serpentarium to learn about common venomous snakes of SEA
- **Cultural immersion activities**, such as Thai boxing and heritage walks, that let students experience health not just as a science—but as a way of life.
- **Collaborative group challenges** that sharpen problem-solving and intercultural communication skills while building friendships that last a lifetime.

Why Join?

- Expand your global health lens through a **tropical medicine and community health framework**.
- Be part of a **diverse, international cohort** of like-minded learners.
- Discover how global health is lived and practiced in Thailand—one of Asia's most compelling public health landscapes.

This isn't just a course—it's a **journey of empathy, understanding, and innovation**. Whether you're preparing for a career in medicine, public health, or global development, the **Global Health Summer School at MUIC** will inspire and transform the way you think about health—locally and globally.

 **Come for the knowledge. Leave with a purpose.**